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EXAMINER
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TAN, ALVIN H

ART UNIT	PAPER NUMBER
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2173

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/910,778

Applicant(s)

OKADA, HIDEHIKO

Examiner

Alvin H. Tan

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/24/01, 6/4/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Remarks***

1. Claims 1-60 have been examined and rejected. This document is the first Office action on the merits.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5 and 17 with respect to claim 5, 22 and 34 with respect to claim 22, 39 and 47 with respect to claim 39, 52 and 60 with respect to claim 52, 9, 26, 43, 56, 10, 27, 44, 57, 11, 28, 16, 33, 46, and 59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. Claims 5, 22, 39, and 52 recite the limitation "said conversion rule registration means/step/processing" in lines 10-11 of the claims. There is insufficient antecedent basis for this limitation in the claim.
- b. Claims 9, 26, 43, and 56 recite the limitations "said conversion rule registration means/step/processing", "said screen information conversion means/step/processing" and "said operation execution means/step/processing" in lines 3, 7, and 17-18 (line 14 for claim 43 and

line 15 for claim 56) of the claims respectively. There is insufficient antecedent basis for this limitation in the claim.

- c. Claims 10, 27, 44, and 57 recite the limitation "said conversion rule registration means/step/processing" in line 3 of the claims. There is insufficient antecedent basis for this limitation in the claim.
- d. Claims 11 and 28 recite the limitation "said operation execution means" in line 3 of the claims. There is insufficient antecedent basis for this limitation in the claim.
- e. Claims 16, 33, 46, and 59 recite the limitation "said screen information conversion means/step/processing" in line 7 (line 8 for claims 46, and 59) of the claims. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4, 14-16, 18-21, 31-33, 35-38, 45-46, 48-51, and 58-59 are rejected under 35 U.S.C. 102(b) as being anticipated by Huntsman (US Patent No 5,949,412).

**Claims 1-4, 14-16 (System)**

**Claims 35-38, 45-46 (Method)**

**Claims 48-51, 58-59 (Program)**

5-1. Regarding claims 1, 35, and 48, Huntsman anticipates the claim of a remote operation system for remotely operating a device to be operated through a communication network from an operation side terminal, by teaching a remote control system that provides for a GUI program on a first "controlled" computer to be controlled from a second, potentially remote "controlling" computer [*column 4, lines 6-10*] by using hypertext browser programs on the internet and other networks to control a GUI based program on a first computer [*column 4, lines 16-19*].

Huntsman anticipates screen analysis means for analyzing information displayed on a screen of said device to be operated, by teaching a GUI-screen-reading means, which is a means to read the GUI screen of the first computer into a data structure of a control program [*column 5, lines 2-5*].

Huntsman anticipates screen information transmission means for transmitting data of an analysis result obtained by said screen analysis means to said operation side terminal to display the data on said operation side terminal, by teaching a GUI-screen-to-hypertext-translating means to translate the data structure representing the screen into hypertext language text [*column 5, lines 66-67; column 6, lines 1-2*] to be displayed by a browser on the screen of the second computer [*column 6, lines 20-23*].

Art Unit: 2173

5-2. Regarding claims 2, 36, and 49, Huntsman anticipates the claim of the system further comprising operation execution means for causing said device to be operated to execute predetermined processing corresponding to user's operation conducted using said operation side terminal, by teaching a programmatic-GUI-control-execution means to execute a particular control function on the first computer once it has been interpreted *[column 6, lines 61-64]*.

5-3. Regarding claims 3, 37, and 50, Huntsman anticipates the claim of the system further comprising screen information conversion means for converting data of an analysis result obtained by said screen analysis means into data suitable for the transmission to said operation side terminal or for displaying on a screen of said operation side terminal, wherein said screen information transmission means transmits data of a result of conversion by said screen information conversion means to said operation side terminal to display the data on said operation side terminal, by teaching a GUI-screen-to-hypertext-translating means to translate the data structure representing the screen into hypertext language text *[column 5, lines 66-67; column 6, lines 1-2]*.

5-4. Regarding claims 4, 38, and 51, Huntsman anticipates the claim wherein the system further comprising conversion rule registration means for registering and recording rules for converting data of an analysis result obtained by said screen analysis means into data suitable for the transmission to said operation side terminal or for displaying on the screen of said operation side terminal, wherein said screen

Art Unit: 2173

information conversion means converts data of an analysis result obtained by said screen analysis means based on the conversion rules recorded in said conversion rule registration means, by teaching a GUI-screen-to-hypertext-translating means that translates the data structure representing the screen into hypertext language text *[column 5, lines 66-67; column 6, lines 1-2]*. See *[figure 9]* for an example of a GUI screen that has been translated to HTML.

5-5. Regarding claim 14, Huntsman teaches the claim wherein said communication network is the Internet *[column 2, lines 66-67, column 3, lines 1-4]*.

5-6. Regarding claims 15, 45, and 58, Huntsman anticipates the claim of the system wherein said screen analysis means, when moving picture or still picture is displayed on the screen of said device to be operated, detects the display in question to extract picture data of the display in question, and said screen information transmission means transmits said picture data extracted by said screen analysis means to said operation side terminal to display the data on said operation side terminal, by teaching that Windows SDK API is used to read a computer screen and store the resulting bitmap in a data structure Microsoft calls a DIB *[column 5, lines 62-65]*. The screen image in the DIB data structure is converted into GIF file format *[column 6, lines 5-8]* where it is used in an HTML file to display the image *[column 6, lines 14-23]*.

5-7. Regarding claims 16, 46, and 59, Huntsman anticipates the claim of the system wherein said screen analysis means, when moving picture or still picture is displayed on the screen of said device to be operated, detects the display in question to extract picture data of the display in question, and screen information conversion means converts said picture data extracted by said screen analysis means into data suitable for the transmission to said operation side terminal or for displaying on the screen of said operation side terminal, by teaching that Windows SDK API is used to read a computer screen and store the resulting bitmap in a data structure Microsoft calls a DIB [*column 5, lines 62-65*]. The screen image in the DIB data structure is converted into GIF file format [*column 6, lines 5-8*] where it is used in an HTML file to display the image [*column 6, lines 14-23*]. Thus, picture data is extracted from the device to be operated and is converted into data suitable for display in a web page where it is transmitted to said operation side terminal.

#### **Claims 18-21, 31-33**

5-8. Regarding claim 18, Huntsman anticipates the claim of a remote operation system for remotely operating a device to be operated through a communication network from an operation side terminal, by teaching a remote control system that provides for a GUI program on a first "controlled" computer to be controlled from a second, potentially remote "controlling" computer [*column 4, lines 6-10*] by using hypertext browser programs on the internet and other networks to control a GUI based program on a first computer [*column 4, lines 16-19*].



Huntsman anticipates screen analysis means for analyzing information displayed on a screen of said device to be operated, by teaching a GUI-screen-reading means, which is a means to read the GUI screen of the first computer into a data structure of a control program *[column 5, lines 2-5]*.

Huntsman anticipates screen information transmission means for transmitting data of an analysis result obtained by said screen analysis means to said operation side terminal to display the data on said operation side terminal, by teaching a GUI-screen-to-hypertext-translating means to translate the data structure representing the screen into hypertext language text *[column 5, lines 66-67; column 6, lines 1-2]* to be displayed by a browser on the screen of the second computer *[column 6, lines 20-23]*.

Huntsman anticipates said device to be operated comprising the screen analysis and information transmission means stated above, by teaching the remote control system containing the GUI-screen-reading means and the GUI-screen-to-hypertext-translating means *[figure 2]* located within the first "controlled" computer *[figure 3]*.

5-9. Regarding claims 19-21, and 31-33, Huntsman teaches the invention. See sections 6-2 to 6-7.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2173

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5, 13, 17, 22, 30, 34, 39, 47, 52, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huntsman (US Patent No 5,949,412), *supra*, and Martin, Jr. et al (US Patent No 6,610,105).

**Claims 5, 13, 17 (System)**

**Claims 22, 30, 34**

**Claims 39, 47 (Method)**

**Claims 52, 60 (Program)**

7-1. Regarding claims 5, 22, 39, and 52, Huntsman teaches the invention substantially as claimed. See sections 5-1 (5-8 for claim 22) and 5-3. Huntsman teaches the claim of a remote operation system for remotely operating a device to be operated through a communication network from an operation side terminal, by teaching a remote control system that provides for a GUI program on a first "controlled" computer to be controlled from a second, potentially remote "controlling" computer [*column 4, lines 6-10*] by using hypertext browser programs on the internet and other networks to control a GUI based program on a first computer [*column 4, lines 16-19*].

Huntsman teaches screen analysis means for analyzing information displayed on a screen of said device to be operated, by teaching a GUI-screen-reading means, which is a means to read the GUI screen of the first computer into a data structure of a control program [*column 5, lines 2-5*].

Huntsman teaches screen information transmission means for transmitting data of an analysis result obtained by said screen analysis means to said operation side terminal to display the data on said operation side terminal, by teaching a GUI-screen-to-hypertext-translating means to translate the data structure representing the screen into hypertext language text [*column 5, lines 66-67; column 6, lines 1-2*] to be displayed by a browser on the screen of the second computer [*column 6, lines 20-23*].

Huntsman teaches the claim of the system further comprising screen information conversion means for converting data of an analysis result obtained by said screen analysis means into data suitable for the transmission to said operation side terminal or for displaying on a screen of said operation side terminal, wherein said screen information transmission means transmits data of a result of conversion by said screen information conversion means to said operation side terminal to display the data on said operation side terminal, by teaching a GUI-screen-to-hypertext-translating means to translate the data structure representing the screen into hypertext language text [*column 5, lines 66-67; column 6, lines 1-2*].

Huntsman teaches that a need exists for the ability to control GUI program remotely from a dissimilar computer [*column 2, lines 63-64*]. Huntsman does not expressly teach the system further comprising device characteristic detection means for detecting device characteristics of said operation side terminal, wherein said screen information conversion means converts data of an analysis result obtained by said screen analysis means based on device characteristics detected by said device

characteristic detection means and conversion rules recorded in conversion rule registration means.

Martin, Jr. teaches a remote access system, similar to that of Huntsman wherein Martin, Jr. further teaches techniques to facilitate participation of a mobile device in accessing resources over a data network *[column 2, lines 34-36]*. Martin, Jr. teaches receiving a request for a web page from a requestor, determining device characteristics of a mobile device used by the requestor, retrieving menu information based on the device characteristics of the mobile device used by the requester, producing the navigation aid based on the menu information, the navigation aid being in a format suitable for the mobile device, and forwarding the web page including the navigation aid to the requester *[column 2, lines 49-56]*.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the computer remote system of Huntsman, the technique taught by Martin, Jr. for producing a navigation aid on a web page for a mobile device by detecting device characteristics and converting the navigation aid into a format suitable for the mobile device. This would allow many different mobile devices with different operating environments to access the GUI web page representing the GUI of a computer, and thus, provide remote access to a computer using the mobile device, as suggested by Martin, Jr.

7-2. Regarding claims 13 and 30, Huntsman teaches the invention substantially as claimed. See section 5-1 (5-8 for claim 30). Huntsman does not expressly teach the

system wherein said operation side terminal is a portable communication terminal having a character data transmission and reception function.

Martin, Jr. teaches a mobile device that can receive a request for a web page from a requestor [column 2, line 49] and a phone keypad [figure 1B, reference character "154"] for character data transmission.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the computer remote system of Huntsman, the portable communication device taught by Martin, Jr. having character data transmission and reception functions. This would provide mobility and flexibility to users when remotely accessing a computer.

7-3. Regarding claims 17, 34, 47, and 60, Huntsman and Martin, Jr. teach the invention substantially as claimed. See section 7-1. Huntsman does not expressly teach the system wherein device characteristics of said operation side terminal detected by said device characteristic detection means include at least one of an inherent ID of said operation side terminal, a kind of machine, a processing rate, a communication rate, communication costs per unit volume of data, communication costs per unit time, a data format that can be displayed on a screen, a playable sound data format, executable program and script formats, a volume of data receivable at one time, a color that can be displayed, a character font that can be displayed, a screen resolution, a physical length of a screen in a vertical direction and a lateral direction and the number of characters that can be displayed within one screen in the vertical direction and lateral direction.

Martin, Jr. teaches that the device information obtained includes one or more of device characteristics, rendering context for the menu, and user identify and/or browser type utilized by the requesting device *[column 11, lines 5-9]*.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the remote access system of Huntsman, device characteristics of the device taught by Martin, Jr. in order to be able to determine what kind of device is being used to remotely access a computer so as to more accurately produce the interface for remote access, as suggested by Martin, Jr.

8. Claims 6-9, 23-26, 40-43, and 53-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huntsman (US Patent No 5,949,412), supra, and Fagioli (US Patent No 6,710,790).

**Claims 6-9 (System)**

**Claims 23-26**

**Claims 40-43 (Method)**

**Claims 53-56 (Program)**

8-1. Regarding claims 6, 23, 40, and 53, Huntsman teaches the invention substantially as claimed. See section 5-1 (5-8 for claim 23). Huntsman teaches the claim of a remote operation system for remotely operating a device to be operated through a communication network from an operation side terminal, by teaching a remote control system that provides for a GUI program on a first "controlled" computer to be

controlled from a second, potentially remote "controlling" computer [column 4, lines 6-10] by using hypertext browser programs on the internet and other networks to control a GUI based program on a first computer [column 4, lines 16-19].

Huntsman teaches screen analysis means for analyzing information displayed on a screen of said device to be operated, by teaching a GUI-screen-reading means, which is a means to read the GUI screen of the first computer into a data structure of a control program [column 5, lines 2-5].

Huntsman teaches screen information transmission means for transmitting data of an analysis result obtained by said screen analysis means to said operation side terminal to display the data on said operation side terminal, by teaching a GUI-screen-to-hypertext-translating means to translate the data structure representing the screen into hypertext language text [column 5, lines 66-67; column 6, lines 1-2] to be displayed by a browser on the screen of the second computer [column 6, lines 20-23].

While Huntsman teaches a refresh operation, Huntsman does not expressly teach the system further comprising screen change detection means for detecting a change in display of the screen of said device to be operated, wherein at a time when a change occurred in display of the screen is completed, said screen analysis means analyzes the current screen of said device to be operated.

Fagioli teaches controlling a host computer from a remote computer, similar to that of Huntsman wherein Fagioli further teaches that a host application detects changes in the host computer display bitmap in order to generate messages for the

Art Unit: 2173

remote application indicating updating, or refreshing, portions of the remote application copy of the host computer display bitmap *[column 8, lines 16-21]*.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the remote access system of Huntsman, the method of detecting a change in the display of the host computer and updating the display on the remote computer as taught by Fagioli. This would allow the user at the remote computer to accurately view all the functions that are being performed on the host computer, as suggested by Fagioli.

8-2. Regarding claims 7, 24, 41, and 54, Huntsman teaches the invention substantially as claimed above. Huntsman teaches the system wherein said device to be operated is an information processing device having a GUI *[column 2, lines 66-67, column 3, lines 1-4]*.

Huntsman does not teach said screen analysis means detects GUI widgets displayed on the screen of said device to be operated to obtain attribute data of said GUI widgets. Fagioli teaches a method in which a viewport of a remote computer can determine which portion of the host computer display image is reproduced within a remote application display window and can automatically be adjusted so as to display the portion of the host computer display image which includes the currently active host window *[column 2, lines 29-35]*. In order to do this, the viewport must detect the window that is currently active on the host computer along with its dimensions *[column 2, lines 55-60]*.



It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the system that uses hypertext browser programs on the Internet and other networks to control a GUI based program on a first computer of Huntsman, the method of detecting an active window on a computer in order to automatically adjust the display portion to include the currently active window as taught by Fagioli. This would allow devices with smaller display screens than the host computer to remotely control the host computer while eliminating the problems of windows requiring user input to be displayed outside the viewable region, as suggested by Fagioli.

8-3. Regarding claims 8, 25, 42, and 55, Huntsman and Fagioli teach the invention substantially as claimed above. Huntsman does not teach the system wherein the attribute data of said GUI widgets includes at least one of a kind of said GUI widgets, a name of said GUI widgets and a location of said GUI widgets in the screen.

Fagioli teaches storing the location of the active window [*column 12, lines 19-23*] in order to determine where to move the viewport rectangle. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the system that uses hypertext browser programs on the Internet and other networks to control a GUI based program on a first computer of Huntsman, the method of detecting the location of an active window on a computer in order to automatically adjust the display portion to include the currently active window as taught by Fagioli. This would allow devices with smaller display screens than the host computer to remotely control

the host computer while eliminating the problems of windows requiring user input to be displayed outside the viewable region, as suggested by Fagioli.

8-4. Regarding claims 9, 26, 43, and 56, Huntsman and Fagioli teach the invention substantially as claimed above. Huntsman further teaches the system wherein conversion rule registration means has registration of rules for converting data of an analysis result obtained by said screen analysis means into a web page that can be displayed by a web browser, by teaching a GUI-screen-to-hypertext-translating means that translates the data structure representing the screen into hypertext language text *[column 5, lines 66-67; column 6, lines 1-2]*.

Huntsman teaches said screen information conversion means converts data of an analysis result obtained by said screen analysis means into a web page based on said rules, by teaching a GUI-screen-to-hypertext-translating means to translate the data structure representing the screen into hypertext language text *[column 5, lines 66-67; column 6, lines 1-2]*.

Huntsman teaches said web page includes a hyper-link and when said hyper-link is selected, data for identifying GUI widgets corresponding to the hyper-link in question and data for identifying operation for the GUI widgets in question are transmitted to the operation execution means, by teaching a hypertext query string sent to the first computer corresponding to the screen coordinates the user clicked on *[column 6, lines 44-47]*. Huntsman teaches a programmatic GUI-control-execution means to execute a particular control function on the first computer once it has been interpreted *[column 6,*

*lines 61-64*]. The screen coordinates identify the GUI widgets corresponding to the hyper-link in question and the coordinate naming convention [*column 7, lines 21-22*] is used to identify operation for the GUI widgets.

Huntsman does not expressly teach GUI widgets detected by said screen analysis means. Fagioli teaches a method to detect a window that is currently active on the host computer along with its dimensions. See section 8-2 above. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the system that uses hyper-links for the operation of GUI widgets to control a GUI based program on a first computer of Huntsman, the method of detecting the location of an active window on a computer in order to automatically adjust the display portion to include the currently active window as taught by Fagioli. This would allow the user to more easily identify and control the operation of the GUI widgets actively displayed on the screen, as suggested by Fagioli.

9. Claims 10-11, 27-28, 44, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huntsman (US Patent No 5,949,412), *supra*, and Rosenblatt et al (US Patent No 6,263,363).

**Claims 10-11 (System)**

**Claims 27-28**

**Claim 44 (Method)**

**Claim 57 (Program)**

9-1. Regarding claims 10, 27, 44, and 57, Huntsman teaches the invention substantially as claimed. See section 5-1 (5-8 for claim 27). Huntsman teaches the claim of a remote operation system for remotely operating a device to be operated through a communication network from an operation side terminal, by teaching a remote control system that provides for a GUI program on a first "controlled" computer to be controlled from a second, potentially remote "controlling" computer [*column 4, lines 6-10*] by using hypertext browser programs on the internet and other networks to control a GUI based program on a first computer [*column 4, lines 16-19*].

Huntsman teaches screen analysis means for analyzing information displayed on a screen of said device to be operated, by teaching a GUI-screen-reading means, which is a means to read the GUI screen of the first computer into a data structure of a control program [*column 5, lines 2-5*].

Huntsman teaches screen information transmission means for transmitting data of an analysis result obtained by said screen analysis means to said operation side terminal to display the data on said operation side terminal, by teaching a GUI-screen-to-hypertext-translating means to translate the data structure representing the screen into hypertext language text [*column 5, lines 66-67; column 6, lines 1-2*] to be displayed by a browser on the screen of the second computer [*column 6, lines 20-23*].

Huntsman does not teach the system wherein conversion rule registration means has registration of rules for converting data of an analysis result obtained by said screen analysis means into a text of electronic mail.

Rosenblatt teaches a similar invention for remotely accessing a computer over the Internet. Rosenblatt teaches that changes made to the virtual copy (the device to be operated) during a session remotely controlled from the remote access client computer are sent to the home computer to synchronize the home computer with its virtual copy. The process can be undertaken by several methods according to user selection, including emailing the changes to the home computer (or elsewhere as designated by the user), selecting where the updates will be stored on the home computer, and selecting how file conflicts are handled *[column 9, lines 42-52]*.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the remote access system of Huntsman, e-mailing the changes made to the device to be operated as taught by Rosenblatt. This would allow the user to keep track of what operations have been performed remotely.

9-2. Regarding claims 11 and 28, Huntsman and Rosenblatt teach the invention substantially as claimed above. Huntsman does not expressly teach the system wherein operation execution means receives electronic mail including information of user's operation conducted using said operation side terminal, analyzes the received electronic mail to identify the user's operation, and executes the operation in question.

Rosenblatt teaches that changes made to the virtual copy (the device to be operated) during a session remotely controlled from the remote access client computer are sent to the home computer to synchronize the home computer with its virtual copy. The process can be undertaken by several methods according to user selection,

Art Unit: 2173

including emailing the changes to the home computer (or elsewhere as designated by the user), selecting where the updates will be stored on the home computer, and selecting how file conflicts are handled *[column 9, lines 42-52]*. In order to synchronize the home computer with its virtual copy, the home computer must identify the changes and perform all the operations carried out by the remote computer, which are listed in the e-mail.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the remote access system of Huntsman, the method of using e-mail to communicate the commands and changes made to the device to be operated as taught by Rosenblatt. This would allow a user to update a remote device by using standard e-mail protocols.

10. Claims 12 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huntsman (US Patent No 5,949,412), *supra*, and Walsh et al (DocBook: The Definitive Guide, October 1999).

**Claim 12****Claim 29**

10-1. Regarding claims 12 and 29, Huntsman teaches the invention substantially as claimed. See section 5-1 (5-9 for claim 29). Huntsman teaches the claim of a remote operation system for remotely operating a device to be operated through a communication network from an operation side terminal, by teaching a remote control

system that provides for a GUI program on a first "controlled" computer to be controlled from a second, potentially remote "controlling" computer *[column 4, lines 6-10]* by using hypertext browser programs on the internet and other networks to control a GUI based program on a first computer *[column 4, lines 16-19]*.

Huntsman teaches screen analysis means for analyzing information displayed on a screen of said device to be operated, by teaching a GUI-screen-reading means, which is a means to read the GUI screen of the first computer into a data structure of a control program *[column 5, lines 2-5]*.

Huntsman teaches screen information transmission means for transmitting data of an analysis result obtained by said screen analysis means to said operation side terminal to display the data on said operation side terminal, by teaching a GUI-screen-to-hypertext-translating means to translate the data structure representing the screen into hypertext language text *[column 5, lines 66-67; column 6, lines 1-2]* to be displayed by a browser on the screen of the second computer *[column 6, lines 20-23]*.

Huntsman teaches that data of an analysis result obtained by said screen analysis means is translated into hypertext language text *[column 5, lines 66-67; column 6, lines 1-2]*. Further, Huntsman teaches that the present invention is easily adaptable to any kind of hypertext transport system and any kind of hypertext language *[column 8, lines 54-56]*.

Huntsman does not expressly teach the system wherein data of an analysis result obtained by said screen analysis means is data of an XML format. Walsh teaches that XML promises an intelligent improvement over HTML, and compatibility with it is

already being built into the most popular web browsers [Section 1.1, paragraph 3, lines 1-2]. Walsh teaches that the rules of XML are designed to make it easier to write both applications that interpret its type of markup and applications that generate its markup [Section 1.1, paragraph 3, lines 6-8].

It would have been obvious to one of ordinary skill in the art at the time the invention was created to translate the data structure representing the screen into XML format because it offers greater flexibility in organizing and presenting information than is possible with the HTML coding system, as suggested by Walsh.

### ***Conclusion***

11. The prior art made of record on attached form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach similar systems for a remote operation system and method.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin H. Tan whose telephone number is 571-272-8595. The examiner can normally be reached between 8:30am-4:30pm, Mon-Fri.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on 571-272-4048. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Art Unit: 2173

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